

Preface

Message from the Program Chairs and Guest Editors

IEEE VR 2020 Program Chairs

Maud Marchal, *University Rennes, INSA/IRISA, France*

Joseph L. Gabbard, *Virginia Tech, United States*

Joaquim Jorge, *Instituto Superior Técnico, Portugal*

Torsten W. Kuhlen, *RWTH Aachen University, Germany*

Anthony Steed, *University College London, United Kingdom*

In this special issue of *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, we are pleased to present a subset of papers from the 27th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2020), held March 22–26, 2020, in Atlanta, Georgia.

These journal papers represent a range of different forms of contributions to our discipline: methodological papers, technology papers, application papers, and system papers. The topics covered in the papers include tracking and sensing, novel display technologies, user perception, audio rendering, agency and embodiment, user interaction, and animals in VR, to name a few.

There are 29 papers in this special issue, which were selected from a total of 164 submissions, for an acceptance rate of 17.7%. The number of submissions is 15% higher than last year, reflecting both the growing interest and activity in our field. Each of the papers in this special issue went through a rigorous two-round review procedure. In the first round, each paper was assigned a primary and secondary reviewer, from a pool of 45 international program committee members. These assignments were based on a combination of bidding and computed best-match algorithms based on committee members' uploaded sample papers. After bidding, the primary and secondary reviewers then assigned at least two external experts. Primary, secondary and external reviewers all performed extensive reviews of each assigned paper, resulting in at least four full reviews per submission. After these reviews were completed, an online discussion phase ensued in which the reviewers for each paper came to a consensus initial recommendation for that submission among the three possibilities: conditionally accept, reject, or discuss with additional readers. The program chairs then convened for a preliminary video-chat-based meeting, where a consensus agreement was reached on the initial partitioning of the full set of submissions, based on frequent exchanges with the primary reviewers as needed. At this meeting, final decisions were taken on the papers in the "clear accept" and "clear reject" categories, and, for each of the papers remaining in the "discuss" category, a second bidding process selected one member of the international program committee as an additional reviewer. After a two-week

period, the program chairs re-convened for a second online meeting, and reached final decisions on the remaining submissions, again relying on consensual recommendations from primary, secondary, and external reviewers. Finally, the papers recommended for conditional acceptance to *IEEE TVCG* were forwarded to the TVCG board for their consideration and approval. Following its conditional acceptance, each paper then went through a minor revision cycle, and was assessed a second time by its primary reviewer to check whether the final version satisfactorily addressed reviewer concerns. All papers were then subjected to a thorough IEEE CrossCheck / iThenticate review to check for plagiarism.

Many individuals contributed a great deal of time and energy towards the success of this special issue. We would like to thank the 688 authors of submitted papers for sending their work for consideration to IEEE VR and *TVCG*, as well as the 45 members of the international program committee and the 231 external reviewers for their many hours of dedicated efforts to select the exceptional papers that appear here. We would also like to acknowledge James Stewart for his reliable assistance with the PCS reviewing system, Conference Co-Chair Ed Swan for his help in improving the publishing process, and Lisa O'Connor for assistance with IEEE Conference Publishing Services. We warmly thank the Virtual Reality Steering Committee for their valuable advice and leadership. We would also like to thank Klaus Mueller, the Editor-in-Chief of *TVCG*, as well as Doug Bowman, the Associate Editor-in-Chief, for making this special issue possible.